

Environmental racism in Canada

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You are a family physician doing a locum in northwestern Ontario. Your next patient is a 6-year-old child who presents with chronic fatigue and paresthesia in their extremities. Upon physical examination, you also discover bilateral hearing impairment.¹ You recall reading in the news that, years ago, 10,000 kg of mercury were dumped into the Wabigoon River, thereby polluting downstream water and poisoning the fish that sustain communities such as Asubpeeschoseewagong (Grassy Narrows) First Nation.^{2,3} In addition to other investigations, you conduct a 24-h urine mercury test for the patient and ascertain that they have abnormal mercury levels. How do you treat this patient? How do you respond to this issue at the community level? To what extent do you consider how the environment, history, and economic factors contributed to this patient's presentation?

Environmental racism refers to environmental policies, acts, and decisions that, intentionally or not, disproportionately disadvantage racialized individuals, groups, and communities.⁴ Environmental racism is a substantial problem in Canada. The United Nations noted that “marginalized groups, and Indigenous peoples in particular, find themselves on the wrong side of a toxic divide, subject to conditions that would not be acceptable in respect of other groups in Canada.”⁵ There are numerous examples of environmental racism in Canada, resulting in hazardous sites and long-term pollution of the land and water in Indigenous and other racialized communities. Examples include pulp mill effluent having been pumped into Boat Harbour, NS⁶; mercury pollution of the river in Grassy Narrows First Nation in Ontario^{2,3}; and toxic waste having been dumped in the community of Africville in Halifax, NS.⁷ Environmental racism has serious physical, emotional, psychological, and spiritual health effects, and in an era of truth and reconciliation, its causes and consequences must be addressed and remediated.

Assessing determinants of health as health advocates

Health care professionals need to be educated in the social, cultural, and historical determinants of health, which includes the true history of Canada. They can identify not only the health effects of environmental racism but also its intersection with other determinants of health such as low income, housing instability, underemployment, and poor access to health care. When a patient presents with a health condition such as cancer or organ damage that may be related to exposure to toxic chemicals, part of the history taking includes ascertaining where the exposure took place and whether

a broader community population might be affected. As health advocates, family physicians are called upon to identify the determinants of health that affect a community or population.⁸ Therefore, care should be provided not only for the index patient but also, ideally, for the whole community.

It is also crucial to recognize the intersection of colonialism and other determinants of health, specifically those related to the health of Indigenous peoples. Canada's history has included broken treaty promises, discriminatory acts and policies aimed at assimilation, and the appropriation of land and resources to the exclusion of Indigenous peoples.^{9,10} Colonialism directly affects Indigenous peoples' health and well-being.¹¹ In the context of environmental racism, colonialism has led to structural and institutional racism that continues to shape environmental policies and practices today.¹² For example, dozens of First Nations communities in Canada continue to have long-term drinking water advisories.¹³ This issue stems from the appropriation of Indigenous peoples' lands and the relocation of Indigenous peoples to specific areas, called *reserves*, resulting in complex political jurisdictions for responsibilities such as water management.¹⁴ It is now the federal government's responsibility to address the lack of access to clean drinking water for many Indigenous communities; however, it has failed thus far to create proper and realistic solutions. Adopting a broad perspective of determinants of health cannot be done without recognizing the substantial and ongoing impacts of colonialism on Indigenous peoples' health. Understanding colonialism as an important determinant of health should help us realize that we must actively work to deconstruct the colonial systems underpinning our society.¹⁵

Where do we go from here?

First, as health care providers and Canadians, we need to educate ourselves about the true history of Canada. Second, we should become aware that environmental racism exists in our country, and as per the *CanMEDS–Family Medicine Indigenous Health Supplement*, we must “challenge the systems that we work in to make changes to racist processes and policy.”¹⁶ We know racialized communities are disproportionately affected by environmental hazards and we know this has profound health implications. If we want to address health from a proactive and preventive standpoint, we must advocate for sustainable change and listen to the voices of those who are affected.

The following are suggestions for policy change to address environmental racism:

- Indigenous peoples' laws preceded Western laws and were based on original instructions and the laws of nature.

They were effective in protecting life and maintaining harmony with nature. Decision makers, whether in environmental or health fields, need to involve Indigenous peoples at the table at every level (ie, municipal, provincial, territorial, federal, international). Having those Indigenous peoples who are most affected by these policies included in these discussions will be instrumental to ensuring proposed changes are effective and appropriate.

- Bill C-230 was a federal bill that sought to require the Minister of Environment and Climate Change to create a strategy to redress environmental racism. Although that bill died with the dissolution of Parliament in 2021, the Minister's new mandate letter following the election called for him to "identify, and prioritize the clean-up of, contaminated sites in areas where Indigenous Peoples, racialized and low-income Canadians live" and to "recognize the 'right to a healthy environment' in federal law."¹⁷ Read more about this mandate and learn how you can urge the government to act on these promises at <https://www.enrichproject.org/support-environmental-racism-legislation/>.

Second, we need to acknowledge how Canada's history of colonization acts as one of the most critical determinants of health for Indigenous peoples and feeds into our own biases.

The following are recommendations for learning more about Canada's colonial foundation:

- Read the 94 calls to action from the Truth and Reconciliation Commission of Canada¹⁸ and understand how having the government answer these calls to action is crucial to addressing the impact of colonization as a distal determinant of health.
- Encourage each medical student and physician to reflect on their own identity and understand their place in history. Relationship building is key to honouring truth and reconciliation and this reflection is an essential step to take before developing relationships with Indigenous peoples.

Finally, within our own practices, we must view patient risk factors from a broad perspective, continually acknowledging how the determinants of health interact to create specific health problems and outcomes. Once we have acknowledged these risk factors, we must assess their impacts on the patient's family and surrounding community. Doing so in practice will foster open-mindedness and better patient care.

The following recommendations for undergraduate and postgraduate family medicine curriculum changes are designed to support the adoption of a determinants of health framework:

- Incorporate case studies and examples that show a range of determinants of health and encourage students to reflect critically on the interaction among these determinants of health.
- Invite Indigenous guest presenters to share their lived experiences of environmental racism and other

determinants of health in the Canadian health care system context, enabling students to reflect on the relationships between determinants of health and health outcomes.

- Request or organize a continuing medical education session to explore how colonialism may be affecting proximal determinants of health, including environmental racism, in your community.
- Read the Indigenous Health Supplement produced by the College of Family Physicians of Canada, which is a resource meant to help educate and guide family physicians in providing patient-centred care aligned with the needs of Indigenous patients.¹⁶

Adopting these strategies will allow for a better understanding of factors that affect peoples' health and a better approach to patient care within the Canadian health care system.



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Positionality statements

Maya Venkataraman: I come from a settler-immigrant background and currently reside on the traditional and unceded territories of the Coast Salish peoples. I collaborated with Dr Sanderson on this commentary and found her perspective to be invaluable. I acknowledge that I must humbly continue to learn from and listen to Indigenous and other racialized groups who are facing environmental racism. **Dr Stefan Grzybowski:** I am a settler whose ancestry is European. I live on the traditional territories of the Coast Salish peoples. I am a rural family physician and a health services researcher, and I am committed to supporting our adaptation to and mitigation of the climate changes and ecosystem disruptions we collectively face. I believe that the land we live on is borrowed from our children and future generations. We need to return it to them in better condition than when we received it. **Dr Darlene Sanderson:** I am of Cree ancestry (my roots are from Churchill and Norway House in Manitoba) on my mother's side and Georgian and Russian ancestry on my father's. I am a mother, grandmother, daughter, sister, aunt, niece, and nurse. I am so grateful to be a guest on the unceded and occupied lands of the Tk'emlúps to Secwépemc within Secwépemc'ulucw, the traditional territory of the Secwepemc people, and to teach nursing at Thompson Rivers University. I have been blessed that my Cree, Coast Salish, Nuw-chah-nulth, and Māori Elders have shared their knowledge with me in my doctoral work on the cultural meanings of water. I work with Indigenous nations and communities on water protection, health, and climate change. They have shared that traditional laws and teachings can provide all people, plants, and animals a healthy future for the next 7 generations. **Jordie Fischer:** I am a research coordinator with a background in international nutrition and a passion for climate action. I identify as a White cisgender woman and acknowledge I am a settler on the ancestral, traditional, and unceded territories of the Coast Salish peoples where I live and work. I actively work to decolonize and critically examine my beliefs and assumptions. **Arlin Cherian:** I am a settler-immigrant residing on Coast Salish lands. I come from an educational background in public health, with an interest in learning about the intersection of land, climate, and health and its effects, especially on Indigenous peoples in British Columbia. I am humbled to be part of this team as I continue to listen, unlearn, and relearn issues around environmental racism and its effects on Indigenous and other racialized groups in Canada.

Competing interests

None declared

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